

# **RUTHERFORD COUNTY, TENNESSEE**

## **CLASSIFICATION SPECIFICATION**

**CLASSIFICATION TITLE:**

**HVAC / TECHNICIAN**

**FLSA STATUS:**

**NON-EXEMPT**

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### **PURPOSE OF CLASSIFICATION**

The purpose of this classification is to perform preventive maintenance, repair, and troubleshooting work on air conditioning and heating systems. Duties include, but are not limited to: implementing and performing preventative maintenance; performing heat load calculations; repairing equipment; Maintaining HVAC controls; and performing additional duties associated with maintenance of county facilities, equipment, buildings, and grounds within the department as assigned by the Maintenance Department including skilled mechanical, electrical, HVAC, plumbing, and manual work. Assignment to Maintenance Department reports to Facilities Director.

### **ESSENTIAL FUNCTIONS**

**The following duties are normal for this position. The omission of specific statements of the duties does not exclude them from the classification if the work is similar, related, or a logical assignment for this classification. Other duties may be required and assigned.**

Troubleshoots, maintains, inspects, modifies and repairs heating, ventilation systems, air conditioning and refrigeration systems and equipment including DX and hydronics systems and components, screw, reciprocating and absorption chillers, cooling towers, fans and fan motors, pumps and pump motors, electric controls and associated safety, overcurrent and other equipment protection devices.

Implements and facilitates the Energy Management System (EMS) and HVAC controls and Indoor Air Quality (IAQ); Writes, debugs, codes analyzes and enhances programs to balance energy management with comfort control; prepares documentation and control flow charts; monitors and adjusts computer based EMS program for proper HVAC comfort and energy management control.

Assists in the writing of specifications for repairs and new construction. Assists with implementing and maintaining preventive maintenance program for all refrigeration, air conditioning, and heating systems for County-owned or leased structures. Evaluates preliminary mechanical design plans and specs for remodels, upgrades or new construction and provides control "sequence of operation" for HVAC equipment to be incorporated into design plans and specs.

Performs routine oiling of all electrical motors to include fans and auger motors. Examines all electrical connections to ensure that they are tightened free from corrosion. Performs routine maintenance tasks to include cleaning coils, aligning and replacing belts as necessary, replacing filters, cleaning filters, maintaining refrigerant levels, and evaluating operative efficiency through the use of testing equipment. Locates Refrigerant leaks and recovers or repairs as necessary. Replaces compressors, motors, accumulators, thermostatic expansion valves, capillary tubes, or other HVAC components as necessary. Repairs or replaces clogs, gears, pullies, and bushing on auger-type ice machines.

Maintains and repairs walk-in coolers, freezers, and refrigerators. Maintains and repairs gas-fueled upflow and downflow furnaces as well as electrical furnaces, electrical boilers, gas-fueled boilers. Maintains and repairs single phase residential and three phase commercial heat pumps and air conditioners, humidifiers, and dehumidifiers.

Read electrical diagrams and schematics to locate "opens" and "shorts" and repairs or replaces parts or equipment as necessary.

Monitors work done by outside contractors for adherence to state and federal Code Requirements and reports back to supervisor.

Processes work orders to include documenting completion dates, materials used, and man hours required.

Provides response to after-hours calls or emergency situations as needed.

Completes work at assigned workstation determined by supervisor.

Works hours as scheduled

Responsible for maintaining roadside and grounds areas; performs skilled, semi-skilled, and manual work involving ground maintenance.

Performs various tasks associated with grounds maintenance or roadside maintenance, such as mowing grass/weeds, edging landscaped areas, cutting down and removing trees/shrubs, cutting tree limbs, trimming shrubs and hedges, removing debris from ditches and right-of-ways, picking up debris/litter, spreading ground materials, digging holes/trenches, shoveling materials, repairing fences and mailboxes, placing/retrieving signage, loading/unloading trucks, lifting/moving heavy materials, or flagging traffic.

Operates a variety of machinery, equipment, and tools associated with projects and work activities, which may include a mower, weed eater, post hole digger, or refrigerant recovery machine.

Is TCI trained to manage inmates, leads trustees or other workers in performing semi-skilled/manual work and operating equipment associated with general repair and maintenance of county buildings, equipment, grounds, and related facilities within an assigned County department. Assigns tasks, coordinates work activities, and provides training and instruction as needed. Monitors status of work and assists in troubleshooting problem situations.

Ensures that maintenance and operations of buildings, equipment, and systems are in compliance with applicable regulations, codes, laws and standards; assists in ensuring adherence to established safety procedures; monitors work environment and use of safety equipment to ensure safety of employees, trustees, and other individuals; initiates any actions necessary to correct deviations.

Performs various tasks associated with building construction or building maintenance, such as constructing or remodeling buildings/structures, installing walls/ceilings, hanging/finishing drywall, installing flooring surfaces, laying carpet, installing doors/trim, installing drop ceilings, replacing ceiling tiles, repairing roof leaks, constructing wood structures or cabinetry, painting interior/exterior surfaces, pouring concrete, repairing/replacing door hardware, replacing door/window glass, or maintaining fire extinguishers.

Performs various tasks associated with electrical, plumbing, or mechanical projects, such as troubleshooting electrical/plumbing problems, installing/repairing electrical devices, installing electrical receptacles and switches, assembling/installing light fixtures, replacing breakers, replacing light bulbs and ballasts, installing/repairing plumbing fixtures, installing/repairing backflow prevention devices, clearing water lines and drains, repairing plumbing leaks, repairing/rebuilding motors and pumps, repairing/replacing bearings and packings, or repairing/replacing gear boxes and belts.

Performs general/manual work tasks associated with various department projects, which may include assembling furniture, installing furniture/fixtures, hanging artwork/fixtures, moving equipment/furniture, picking up supplies, or locking/unlocking buildings.

Operates a variety of machinery, equipment, and tools associated with projects and work activities, which may include a utility truck chain saw, skil saw, circular saw, drill, shovel, mechanic tools, carpentry tools, plumbing tools, electrician tools, or two-way radio.

Inspects/tests machinery, equipment and parts for proper operations; makes adjustments, repairs or replacements as appropriate; reports problem situations.

Performs general/preventive maintenance tasks necessary to keep vehicles, equipment and tools in operable condition, which may include inspecting equipment, refueling vehicles, checking fluid levels, replacing fluids, greasing equipment, changing tires, tightening bolts, replacing parts, sharpening blades, washing/cleaning equipment, or cleaning shop/work areas; monitors equipment operations to maintain efficiency and safety; reports faulty equipment.

Transports, loads and unloads various equipment and materials used in projects.

Follows safety procedures, utilizes safety equipment, and monitors work environment to ensure safety of employees and other individuals.

Monitors inventory levels of department materials, tools, equipment, and supplies; ensures availability of adequate materials to conduct work activities; initiates requests for new or replacement materials.

Prepares or completes various forms, reports, correspondence, work orders, or other documents.

Receives various forms, reports, correspondence, work orders, receipts, diagrams, policies, procedures, manuals, reference materials, or other documentation; reviews, completes, processes, forwards or retains as appropriate.

Communicates with supervisor, employees, other departments, the public, contractors, outside agencies, and other individuals as needed to coordinate work activities, review status of work, exchange information, or resolve problems.

### **ADDITIONAL FUNCTIONS**

Provides assistance to other employees or departments as needed.

Performs other related duties as required.

### **MINIMUM QUALIFICATIONS**

High school diploma or Equivalent; supplemented by vocational/technical training in Air Conditioning and Refrigeration; with three (3) years experience in HVAC Repair and Maintenance, or related work; or any equivalent combination of education, training, and experience which provides the requisite knowledge, skills, and abilities for this position. Knowledge, skills, and abilities for experience and/or training involving general building maintenance, building construction trades, mechanics, grounds maintenance, equipment operation, and maintenance work in area of assignment; or any equivalent combination this job. Tasks involving installation/repair of backflow prevention devices may require possession and maintenance of valid Backflow Prevention Device Assembly & Testing certification. Tasks involving refrigerant recovery may require possession and maintenance of valid Universal Refrigerant Transition & Recovery Certification. Must possess and maintain a valid Tennessee Driver's License.

### **PERFORMANCE APTITUDES**

**Data Utilization:** Requires the ability to calculate and/or tabulate data. Includes performing subsequent actions in relation to these computational operations.

**Human Interaction:** Requires the ability to exchange information for the purpose of clarifying details within well established policies, procedures and standards.

**Equipment, Machinery, Tools, and Materials Utilization:** Requires the ability to operate and control the actions of equipment, machinery, tools and/or materials requiring complex and rapid adjustments.

**Verbal Aptitude:** Requires the ability to utilize a variety of reference data and information.

**Mathematical Aptitude:** Requires ability to perform addition, subtraction, multiplication, and division; ability to calculate decimals and percentages; ability to utilize principles of fractions; and the ability to interpret graphs.

**Functional Reasoning:** Requires the ability to carry out instructions furnished in written, oral, or diagrammatic form. Involves semi-routine standardized work with some latitude for independent judgment concerning choices of action.

**Situational Reasoning:** Requires the ability to exercise judgment, decisiveness and creativity in situations involving a variety of generally pre-defined duties which are often characterized by frequent change.

## ADA COMPLIANCE/PHYSICAL DEMANDS ANALYSIS

**Physical Ability:** Tasks require the ability to exert moderate, though not constant physical effort, typically involving some combination of climbing and balancing, stooping, kneeling, crouching, and crawling, and which may involve some lifting, carrying, pushing and/or pulling of objects and materials of moderate weight (12-20 pounds); may occasionally involve heavier objects and materials (up to 100 pounds).

**Sensory Requirements:** Some tasks require the ability to perceive and discriminate colors or shades of colors, sounds, depth, texture, and visual cues or signals. Some tasks require the ability to communicate orally.

**Environmental Factors:** Performance of essential functions may require exposure to adverse environmental conditions, such as dirt, dust, pollen, odors, wetness, humidity, rain, fumes, temperature and noise extremes, machinery, vibrations, electric currents, traffic hazards, bright/dim light, or toxic agents.

### PHYSICAL DEMANDS ANALYSIS

**1. STANDING AND WALKING**

**Tasks:** Working on equipment

**Surface:** Smooth to rough

**Estimated Total Hours:** 6 **Maximum Continuous Time:** 2

**2. SITTING**

**Tasks:** Driving service truck

**Estimated Total Hours:** 2 **Maximum Continuous Time:** 45 minutes

**3. LIFTING/CARRYING**

Weight	Hourly	Daily	Weekly	Monthly	Never
<10 lbs	X				
11-25 lbs		X			
26-50 lbs		X			
51-75 lbs			X		
76-100 lbs				X	
>100 lbs					X

**4. PUSHING/PULLING**

**Objects:** Tools, parts, etc

**Height of hands above floor during push:** 4 feet or less

**5. CLIMBING**

**Tasks:** Repairs and service

**Device:** Climbing the side of the containers

**Height:** 8 feet almost

**Frequency:** Weekly

**6. BENDING/SQUATTING/KNEELING**

**Tasks:** Crawling under equipment to service

**Frequency:** Daily

**7. REACHING**

**Tasks:** Working with tools

**Hands Used:** RIGHT    LEFT    BOTH X

Distance	Direction	Frequency	Duration	Avg. Weight
0-20"	Both	Daily	5 minutes	15 lbs
21-36"	Both	Daily	2 minutes	15 lbs

**8. WORK CONDITIONS**

Exposure to	Yes	No
Hot Temperatures	X	
Cold Temperatures	X	
Sudden Changes in Temperature	X	
Noise	X	
Fumes	X	
Cramped Quarters	X	
Cold Surfaces	X	
Hot Surfaces	X	
Sharp Edges	X	
Vibration	X	
Fluorescent Lighting	X	
Computer Monitor Screen Glare		X

Inside Building	15 % of time
Outside	85 % of time

**9. OTHER JOB DEMANDS**

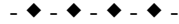
Does Job Require	Yes	No
Crawling	X	
Jumping		X
Lying on Back	X	
Lying on Stomach	X	
Twisting	X	
Sweeping/Mopping	X	
General Cleaning	X	
Handling Trash	X	

**10. HAND USE**

Type of Use	Yes	No	Frequency
Keystrokes		X	
Grasp	X		Daily
Fine Motor i.e: writing, twisting hands or wrist, etc	X		Daily

**Exemption Status (Blue-Collar Workers)**

~Per Fact Sheet #17I of the Fair Labor Standards Act (FLSA) all manual laborers or other "blue collar" workers who perform work involving repetitive operations with their hands, physical skill, and energy are considered non-exempt.



Rutherford County, Tennessee, is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act, the County will provide reasonable accommodations to qualified individuals with disabilities and encourages both prospective and current employees to discuss potential accommodations with the employer. Signatures below indicate the receipt and review of this classification description by the employee assigned to the position and the immediate supervisor.

\_\_\_\_\_  
Employee's Signature

\_\_\_\_\_  
Supervisor's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date